

A SECOND NORTH AMERICAN SPECIES OF TRAGINOPS COQUILLET (DIPTERA, ODINIIDAE)

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In 1944, when I collected a few specimens of *Traginops* sp. on a tree wound, I noticed that some of them had red eyes while others were dark purple, but I could detect no other differences. Since that time the use of the postabdomen of both sexes has become of prime importance in distinguishing species of acalyptate Diptera and I have had the opportunity of examining the postabdomen of the type specimen of *Traginops irroratus*, the type of the genus and only described North American species. I found ample differences in the postabdomens of both sexes and that the species with red eyes is *T. irroratus*. The other species is described below as *T. purpurops*, new species. In view of the facts here brought forth, it seems likely that the other known taxa, *T. orientalis* De Meijere, *T. orientalis naganensis* Kato, and *T. clathratus* Hendel (*vide* Shewell 1960) will be found just as distinct species—the figures of *T. orientalis* male in Hennig (1938, pp. 204, 207) certainly indicate a species distinct from our two.

Traginops irroratus Coquillett (Figs. 1-3, 6)

1900. *Traginops irrorata* Coquillett, Entomol. News 11: 429.

Eyes in life red. A single vibrissa on each side, ending a row of much smaller bristly hairs.

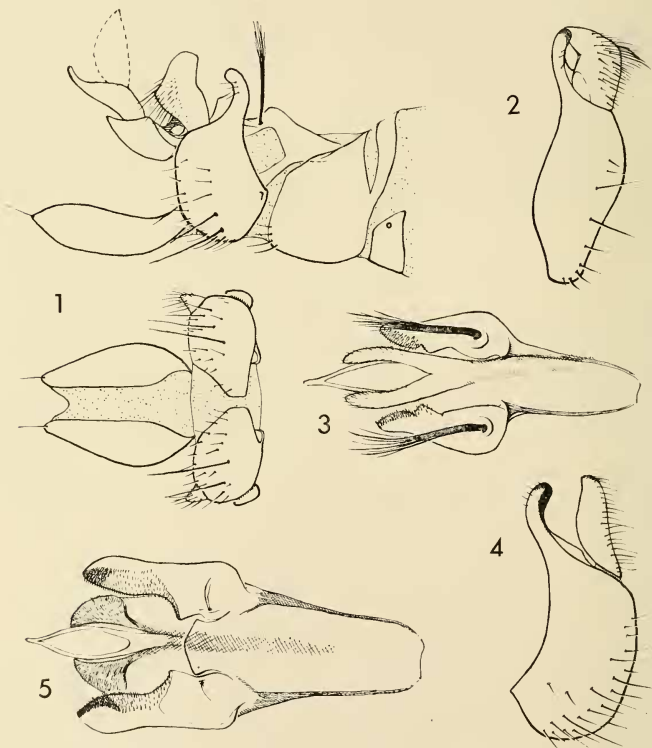
Male postabdomen gaping widely after maceration (fig. 1); tergite 6 symmetrical, entirely free, bearing spiracles 6 near each lateral margin; spiracles 7 not evident; epandrium (fig. 2) nearly or quite divided dorsomedially; surstylus angularly bent forward, with rather long hairs on posterior hump and in posterior view straight on mesal margin; hypandrium (fig. 3) with pair of characteristic long pencils of hairs, compacted basally and frayed out apically, near base of each lateral lobe; cerci mesally conjoined by membrane, forming a scoop-like organ with a single pair of small bristles apically.

Female postabdomen or ovipositor (fig. 6) with no evident spiracles; all sternites and tergites well separated; tergite 7 nearly semicircularly emarginate apically, forming a pair of pointed lobes narrowly connected across dorsum; tergite 6 without distinct basidorsal sulcus and apically only slightly sinuate.

Two spermathecae present, black, at ends of slender ducts approximately 0.9 mm. long. At the base of the ducts a pair of spindle shaped accessory glands on much shorter ducts and a single short duct (? third spermatheca) ending in a black cap. Two specimens (Kerrville, Tex.) showed a pair of spermathecae of the form shown in Fig. 6a; those of a third specimen (Angora, Pa.) had one spermatheca each of the types shown in Figs. 6a and 6b; two more specimens (Albuquerque, N. Mex., and South Haven, Mich.) had both long-ducted spermathecae as in Fig. 6b. The subject calls for additional investigation.

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I have examined the following specimens. FLORIDA: Flagler Co., 18 March 1930, fruit fly trap survey (D. B. Webb), 1 ♀; Hillsboro Co., 8-15 March 1930, fruit fly trap survey (C. L. Rabb), 1 ♂; Sebring, 31 Dec. 1949, at exuding sap of oak (H. V. Weems, Jr.), 1 ♂; GEORGIA: "Southern Georgia" (Morrison), ♂ lectotype, allotype, and 7 paratypes; MARYLAND: Aitkin, 1 Nov. 1930 (C. T. Greene), 2 ♀; Camp Meade, June 1919 (R. C. Shannon), 8 ♂, 3 ♀; College Park, 5 July 1925 (G. M. Greene), 1 ♀; Plummers Id., 7 Aug. 1912 (P. R. Myers), 1 ♀; MICHIGAN: Detroit, 11 June 1944 (G. C.



Figs. 1-3. *Traginops irroratus* Coq. 1, Camp Meade, Va., male postabdomen in lateral view and dorsal view of andrium; 2, So. Georgia, paratype, lateral view of epandrium; 3, same, ventral view of hypandrium. Figs. 4, 5. *Traginops purpuriceps* Stey., sp. nov. 4, Plummers Id., Md., paratype, lateral view of epandrium; 5, same, ventral view of andrium.

Steyskal), 2 ♂; South Haven, 23 June 1938 (C. W. Sabrosky), 1 ♂; NEW MEXICO: Albuquerque, 18 July 1944; "orient survey/44-17802/peach cherry," 1 ♀; PENNSYLVANIA: Angora, 18 Aug. 1907 (C. T. Greene), 2 ♂, 3 ♀; Lehigh Gap, 14 July 1907, 2 ♀; TEXAS: Kerrville, 30 June 1953 (L. J. Bottimer), 3 ♀; VIRGINIA: Falls Church, 15 July, 1 ♀; same, 17 July 1912 (C. T. Greene), resting on trunk of *Fagus*, 2 ♂; same, 22 June 1912 (C. T. Greene), resting on trunk of *Quercus*, 2 ♂; all in United States National Museum, except the Michigan specimens, of which those from Detroit are in my collection and that from South Haven is in the collection of C. W. Sabrosky. Dr. Guy E. Shewell advises me that specimens from Ottawa and Niagara Glen, Ontario, are of this species.

Traginops purpurops, new species

(Figs. 4, 5, 7)

Very similar to *T. irroratus* Coq., except in postabdomen, dark purple color of eye in life, and in having duplicate vibrissae, that is, consisting of two bristles of nearly equal size on each side, about 0.1 mm. apart.

Male.—Postabdomen in general conformation much as in *T. irroratus*; epanthrium (Fig. 4) somewhat broader and more curved in profile, anterior prong relatively longer and more curved; surstylus straighter, narrower, and in posterior view with 60° median tooth on mesal side; inner copulatory apparatus (Fig. 5) without the hair pencils of *T. irroratus*, in their place being only a few short,

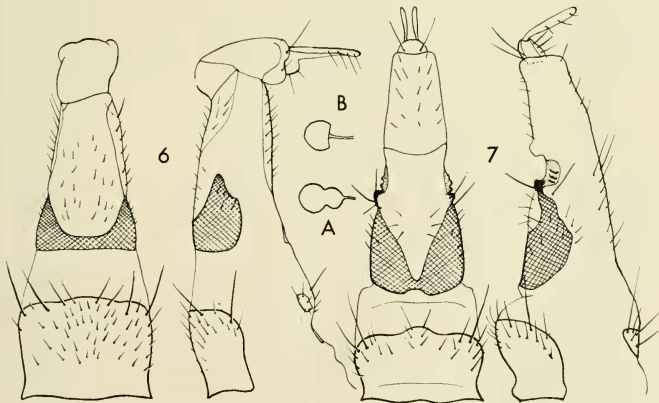


Fig. 6. *Traginops irroratus* Coq., Angora, Pa., dorsal and lateral views of female postabdomen (ovipositor); A, B, two types of spermathecae. Fig. 7. *Traginops purpurops* Stey., sp. nov., Detroit, Mich., paratype, dorsal and lateral views of female postabdomen. N.B.: In Figs. 6 and 7, tergite 6 is cross-hatched,

inconspicuous hairs; lateral lobes of hypandrium of quite different shape; phallosome with flared apical collar.

Female.—Postabdomen (Fig. 7) with tergite 6 distinctly scalloped apically, subbasally with pronounced transverse sulcus; tergite 7 deeply angularly emarginate, its lateral lobes knobbed at tip and followed by a saddle-like groove across the dorsum, at each side of which a small area bears two or three ridges.

Spermathecae two, much as in *T. irroratus*, one of the topotypical paratypes with one spermatheca each of types A and B and a Falls Church paratype with both spermathecae of type B; accessory glands oval, at the end of ducts nearly as long as those of the spermathecae.

Holotype (♂), allotype, and one pair of paratypes, Detroit, Michigan, 21 June 1942, on trunk of *Robinia pseudacacia* feeding at borer frass (G. C. Steyskal), in my collection; paratypes: same locality, 28 June 1942, 1 ♀, and 11 June 1944, 4 ♀, all collected by me and in my collection; KANSAS: Troy, 25 Aug. 1932 (R. L. Parker), 1 ♂; MARYLAND: Bowie, 12 June 1945, DDT Expt., 1 ♀; Camp Meade, May-June 1919 (R. C. Shannon), 2 ♂; Plummers Id., 3 Aug. 1912 (J. R. Malloch), 4 ♂; same, 4 Aug. 1912 (W. L. McAtee), 1 ♀; same, 7 Aug. 1912 (P. R. Myers), 1 pr.; MICHIGAN: Cassopolis, 24 June 1943 (C. W. Sabrosky), 2 ♂; TEXAS: Columbus, 15 Aug. 1904., on sap of *Celtis*, 1 pr.; VIRGINIA: Falls Church, reared 9 May 1916, *Robinia*, host *Ecdytolopha insitiana* Zell., Hopkins no. 12103 N6 (C. Heinrich), 3 ♀; same, 9 July 1956 (W. W. Wirth), 1 ♀; Glencarlynn, 2 July (N. Banks), 1 ♂; all in U. S. Natl. Mus.

LITERATURE CITED

- Hennig, W. 1938. Beiträge zur Kenntnis des Kopulationsapparates und der Systematik der Acalyptraten, I. Arb. morphol. taxon. Entomol. 5: 201-213, pl. 3.
 Shewell, G. E. 1960. Notes on the family Odiniidae with a key to the genera and descriptions of new species (Diptera). Canad. Entomol. 92: 625-633.

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